

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Situation	Force diagram
A book is at rest on a table top. The downward pull of gravity on the book is equal to the upward push of the table top on the book.	
A basketball player throws a ball directly upward with a force three times greater than the downward pull of gravity on the ball.	
A propeller car is moving to the left across the floor. Gravity exerts a downward force on the car, and the floor exerts an equal force upward on the car. At the same time, a motor exerts a force to the left that is twice as large as the force of friction opposing motion that is exerted to the right.	
A weightlifter holds a barbell motionless over his head. Each arm exerts an equal upward force on the barbell. The combined forces exerted upward on the barbell by his two arms are equal to the downward pull of gravity on the barbell.	
A car is moving to the right at a constant speed. The car's motor exerts a force to the right that is equal to the force of friction acting to the left. The downward pull of gravity on the car is equal to the upward push of the ground.	